

# Material Safety Data Sheet

THE ARGEN CORPORATION

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## SECTION 1 - SUBSTANCE IDENTIFICATION

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ALLOY NAME: ARGELITE 71

DESCRIPTION: Color: WHITE Type: 4

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## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

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METAL	%	SYMBOL	CAS NO	ACGIH 8 HR TLV	OSHA 8 HR PEL
PALLADIUM	70.9	Pd	7440-05-3	No data	No data
SILVER	10	Ag	7440-22-4	0.01 mg/m3	0.1 mg/m3
RUTHENIUM	<1	Ru	7440-18-8	No data	No data
INDIUM	8	In	7440-74-6	0.1 mg/m3	0.1 mg/m3 TWA
GALLIUM	<1	Ga	7440-55-3	No data	No data
ZINC	5	Zn	7440-66-6	5mg/m3	No data
TIN	5.3	Sn	7440-31-5	2 mg/m3	2 mg/m3

Note: % values are in weight percent and reflect nominal composition.

Note: 'x' denotes a content of less than one percent

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## SECTION 3- HAZARDS IDENTIFICATION

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EYES: Contact with eyes may cause severe irritation and possible eye burns.

SKIN: May cause severe irritation and possible burns.

INGESTION: May cause gastrointestinal irritation with nausea, vomiting, and diarrhea.

INHALATION: May cause irritation and burns to the respiratory tract.

NOTE: Exposure levels for elements in this alloy are listed in SECTION 2. The following health data is for specific elements:

SILVER Absorption of silver compounds by ingestion, inhalation or through broken skin can cause argyria, a permanent bluish-grey discoloration of the skin, conjunctiva and mucous membranes. Generalized argyria develops after 2 to 25 years of exposure. There are no systematic effects or symptoms and no physical disability. Silver is considered an experimental equivocal tumorigenic agent by RTECS criteria.

GALLIUM May cause bone marrow depression.

INDIUM May cause fetal effects based upon animal studies. May cause lung damage and blood abnormalities. Target Organs: Blood, kidneys, liver, lungs.

RUTHENIUM The toxicological properties of this substance have not been fully investigated. May be harmful if swallowed.

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## SECTION 4 - FIRST AID MEASURES

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EYE CONTACT : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids.

SKIN CONTACT: Scrub skin thoroughly with soap and water.

INGESTION: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Induce vomiting. \*\*Never give anything by mouth to an unconscious person. Get medical aid.

INHALATION: Remove affected person to fresh air and assist with additional oxygen if necessary. Get first aid if other symptoms appear.

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## SECTION 5 - FIREFIGHTING MEASURE

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This material is fire and explosion resistant. Heating Beyond the melting range may generate fumes which are not flammable.

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## SECTION 6 - ACCIDENTAL RELEASE MEASURES

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GENERAL INFORMATION: Use proper personal protective equipment as described in section 8.

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## SECTION 7 - HANDLING AND STORAGE

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Avoid inhalation of fumes while melting and dust while grinding. Wash hands thoroughly before eating or smoking to avoid ingestion.

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## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTIONS

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RESPIRATORY: Provide general ventilation and local exhaust to keep levels below the TLV stated in SECTION 8. Wear a NIOSH approved respirator for dust exceeding the TLVs.

HAND: Latex gloves are recommended while grinding, heat resistant gloves should be worn while grinding and handling hot metals or molds.  
EYE PROTECTION: Wear eye protection suitable to each individual operation.  
OTHER: Wear apron, lab coat or other protective clothing.

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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Appearance: WHITE  
Odor: Not Applicable  
pH: Not Applicable  
Boiling Point: Not Applicable  
Melting Range: 1185-1285 °C  
Flash Point: Not Applicable  
Flammability: Not Applicable  
Autoflammability: Not Applicable  
Explosive Properties: Not Applicable  
Oxidizing Properties: Not Applicable  
Vapor Pressure: Not Applicable  
Solubility(Water/Fat): Insoluble

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## SECTION 10 - STABILITY AND REACTIVITY

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At ordinary and high (below the melting range) temperatures, the material oxidizes but is stable. At very high temperatures the alloy produces fumes.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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No specific instructions.

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## SECTION 12 - ECOLOGICAL INFORMATION

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This is an environmentally friendly material. With proper dust collecting equipment, 100% of this alloy can be recycled.

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## SECTION 13 - DISPOSAL CONSIDERATIONS

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Whenever possible, recover dust because it has economic value.

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## SECTION 14 - TRANSPORT INFORMATION

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No specific instructions.

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## SECTION 15 - REGULATORY INFORMATION

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No specific instructions.

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## SECTION 16 - OTHER INFORMATION

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